

190-200 °C for at least about 50-70 minutes. The temperature and time are variable and can be empirically determined for the particular photoresist materials and time of baking to obtain the requisite chemical resistance and stability to treatment and hydrophobicity. Both parameters are important for production of surface with the requisite properties so that the surface can be treated and used in analyses, such as mass spectrometry, and the two materials have the appropriate relative hydrophobicity/hydrophilicity to achieve hydrophobic focussing of the droplets on the target loci.

IN THE CLAIMS:

Please replace claims 8, 11, 13, 50, and 58 with the following amended claims (a marked up copy of the amended claims is attached to this Amendment):

8. A method of claim 5, wherein the cavity of the cylindrical tip has a height greater than approximately 100 μm .

11. A method of claim 1, wherein positioning of the slotted pin tool is effected by pattern recognition to determine correct positioning above the substrate and then moving the slotted pin tool to the determined position.

13. A method of claim 1, wherein lowering the slotted pin tool comprises moving the slotted pin tool at a predetermined speed of lowering.

50. A combination comprising:

a substrate, comprising an array of target locations on a surfaces, wherein the target locations are less hydrophobic than the surrounding areas; and

a pin tool comprising at least one pin having a substantially cylindrical tip with a lateral slot forming a cavity that fits around a material deposited at a target location on the substrate.

58. The method of claim 57, wherein the substrate is baked at between about 190-200 °C for a period of about 50-70 minutes.